ifm electronic

CE

Operating instructions

(Ex protection related part) for flow sensors according to EU directive 94/9/EC Annex VIII (ATEX) group II, equipment category 3D / 3G

UK

efector300®

SI500A

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Remarks for safe use in hazardous areas

Functions and features

- Use in hazardous areas according to the classification
  II 3D (group II, category 3D, apparatus for dust atmosphere).
  The requirements of the standards EN 60079-0 and EN 60079-31 are met.
- Use in hazardous areas according to the classification
  II 3G (group II, category 3G, apparatus for gas atmosphere).
  The requirements of the EN 60079-15 standard are met.
- Marking (see unit or technical data sheet)

II 3D Ex tc IIIC T95°C Dc X
II 3G Ex nA IIC T4 Gc X

- Permissible operating temperature of the application (proper usage):

Ta: -20°C...+60°C

Installation / Set-up

The units must only be installed, connected and set up by qualified staff. The qualified staff must have knowledge of protection classes, regulations and provisions for apparatus in hazardous areas.
Check whether the classification (see "Marking" above and marking on the unit) is suitable for the application.

Installation remarks / Installation

- Adhere to the respective national regulations and provisions as well as the relevant installation regulations.
- Avoid electrostatic charging on plastic units and cables.
- To avoid electrostatic charging clean the unit with a damp cloth only. Rubbing with non-conductive materials must be strictly avoided.
- To avoid electrostatic charging steps must be taken to ensure the equalisation of potential of metal parts (plug housing, fixing elements, protective housing, etc.).
- Do not mount the unit in the dust flow.
- Avoid dust deposits on the units.
- Protect the units and the cables efficiently against damage.
- For the connections and the electrical technical data please see the unit marking or the technical data sheet.
- To avoid soiling, do not remove the connector cover until attaching the socket.
- Avoid direct radiation with high UV components (sunlight). Mount the unit in a protected place.
- M12 plugs may only be opened or closed in a sufficiently clean environment.

Special conditions for safe operation

- The housing and housing parts made of plastic were tested in accordance with table 12 of EN 60079-0 for group II and for a low mechanical risk with an impact energy of 4 joules.
- The unit may only be operated with the protective cover attached to it. If the protective cover is lost, the mechanical stability of the unit is no longer ensured.
- Use sockets which are suited for hazardous dust areas, e.g. ifm sockets EVC**A with 2D certificate (certificate number BVS 08 ATEX E 109 U).
- Protect the sockets by tightening the hexagon coupling nut sufficiently according to the requirements of the Ex protection related operating instructions of the socket.
- Do not separate the connector when energized.
- Apply a durable warning in suitable form close to the connector reading: "Do not separate when energized" or use the enclosed label if you can ensure a durable marking.

Maintenance / Repair

The unit must not be modified nor can it be repaired. In case of a fault please contact the manufacturer.
If required, the technical data sheets and EC declarations of conformity can be obtained from the manufacturer (see cover sheet / back). Indicate the article number.